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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,235	10/28/2003	Christopher Alan Adkins	2003-0258.01	4961

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EXAMINER

CHERRY, STEPHEN J

ART UNIT	PAPER NUMBER
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2863

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/695,235	Applicant(s) ADKINS ET AL.	
	Examiner Anthony T. Dougherty	Art Unit 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 is/are allowed.
- 6) ☒ Claim(s) 10,11,13 and 16-20 is/are rejected.
- 7) ☒ Claim(s) 12,14 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 10, 11, 13, and 16-20 rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,355,927 to Snyder.

This 102 rejection relies heavily on Figure 6 of the prior art so it is included here with an explanation as to corresponding attributes with the instant application.

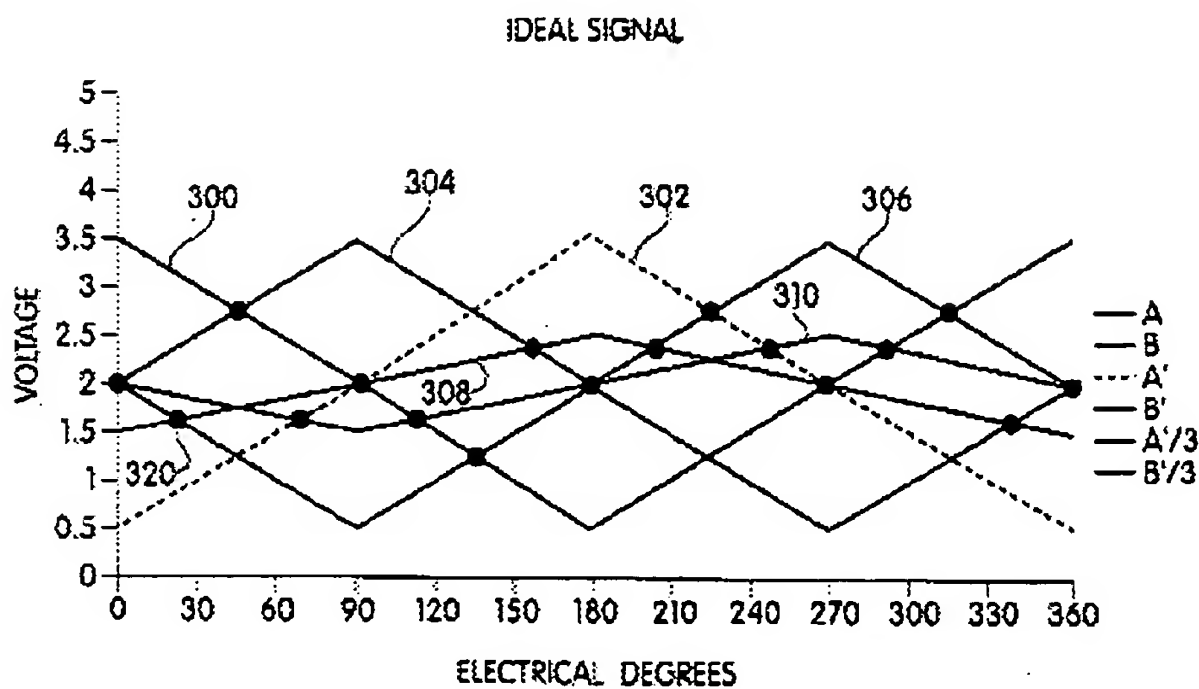


Fig. 6

As can be seen in Figure 6 the signal indicated as A begins at a voltage of 3.5 at 0 degrees and corresponds to the first output signal of the instant application, the signal indicated as B begins at 2 volts at 0 degrees and 3.5 volts at 90 degrees and corresponds to the second output signal of the instant application, and the signal B' represents the inverse of the second output signal and is at 2 volts at 0 degrees and at 0.5 volts at 90 degrees.

With regard to claim 10 Snyder discloses a method for determining the distance moved by a component operatively coupled to an analog encoder having analog first and second output signals (see abstract) by calculating at least one of a first inverse signal which is the inverse of the first output signal and a second inverse signal which is the inverse of the second output signal (see column 3 line 36-38 & Figure 6), calculating the distance moved by the component from a previous position using one of an ascending or descending region of the first or second output signal wherein the previous position is the position of the component corresponding to a crossover level of two signals chosen from the group consisting of the first output signal the second output signal and the at least one inverse signal (see Figure 6).

With regard to claim 11, and applying the rejection of claim 10 above, Snyder discloses the crossover level corresponding to the first high level is determined from at least one of the current value and the most recent previous value of the first output signal and the inverse signal when it has been determined that the ascending first output signal crossed the inverse signal (see

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Figure 6 the intersection indicated by a dot between 300 and 330 degrees [approx. 315°] which is the intersection of A and B').

With regard to claim 13, and applying the rejection of claim 10 above, Snyder discloses updates in crossover levels (see column 5 line 10-27).

With regard to claim 16, and applying the rejection of claim 10 above, Snyder discloses the component is a paper-feed roller powered by a DC motor (see column 5 line 10-27).

With regard to claim 17, and applying the rejection of claim 10 above, Snyder discloses the component is a printhead carrier of a printer (see column 5 line 10-27).

With regard to claim 18, and applying the rejection of claim 10 above, Snyder discloses the ascending regions and descending regions are substantially linear regions (see column 5 line 29-45).

With regard to claim 19, and applying the rejection of claim 10 above, Snyder discloses the step of calculating the distance moved by the component using a different one of the ascending or descending region of the first or second output signal upon a crossover of two signals chosen from the group of the first output signal, the second output signal, and at least one inverse signal (see Figure 6 & column 5 line 47-57).

With regard to claim 20, and applying the rejection of claim 10 above, Snyder discloses the component is adapted to move in a forward direction and in a reverse direction (see column 5 line 10-27).

Response to Arguments

3. Applicant's arguments, see remarks page 2 third paragraph through page 3 second paragraph, filed 1/12/05, with respect to claims 1-9 have been fully considered and are persuasive. The rejection of claims 1-9 has been withdrawn.

4. Applicant's arguments filed 1/12/05 in remarks page 2 paragraph 3 with regard to claim 10 have been fully considered but they are not persuasive. While the examiner appreciates the analog encoder is meant to be the source for the first and second analog signals this limitation is only found in the preamble which is not given patentable weight such that encoder of prior art need not be an analog encoder in order to reject claim 10 under 35 U.S.C. 102. In response to applicant's arguments, the recitation "analog encoder having analog first and second output signals" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

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5. Applicant's arguments, see remarks page 3 paragraph 3, filed 1/12/05, with respect to claim 12 have been fully considered and are persuasive. The rejection of claim 12 has been withdrawn.

6. Applicant's arguments, see remarks page 3 paragraph 4, filed 1/12/05, with respect to claims 14 and 15 have been fully considered and are persuasive. The rejection of claims 14 and 15 has been withdrawn.

7. In response to applicant's argument that claims 16 and 17 are not taught by Snyder in remarks page 3 paragraph 5 through page 4 paragraph 1 filed 1/12/05, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

Allowable Subject Matter

8. Claims 1-9 allowed.

9. Claims 12, 14, and 15 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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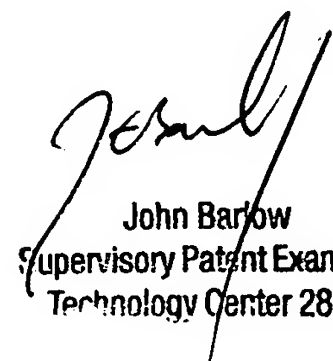
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony T. Dougherty whose telephone number is (571) 272-2273. The examiner can normally be reached on Monday through Friday from 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


atd


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